SUMMARY

DRAFT ENVIRONMENTAL IMPACT STATEMENT AND DRAFT SECTION 4(f) EVALUATION

M-15 from I-75 to I-69
Oakland and Genesee Counties

MDOT
Michigan Department of Transportation

Prepared by

Michigan Department of Transportation

In Cooperation with

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

December 2001

This document has been published by authorization of the Director of the State of Michigan's Department of Transportation in keeping with the intent of the *National Environmental Policy Act of 1969* and subsequent implementing regulations and policies that direct agencies to provide the public and other agencies an opportunity to review and comment on proposed projects and alternatives so that potential impacts of the project can be considered and taken into account during the decision-making process. The cost of publishing 500 copies of this document at approximately $ 1.60 per copy is $800, and the document has been printed in accordance with *Michigan Executive Directive 1991-6*.

1. INTRODUCTION

This Summary provides an overview of the contents of the M-15 Draft Environmental Impact Statement (DEIS) and Draft Section 4(f) Evaluation. Included in the DEIS are the purpose and need for the project, the planning process, a discussion of all alternatives considered, and the Preferred Alternative. Also included are the social, economic, and environmental impacts of the Preferred Alternative, measures to mitigate the impacts, and a summary of the public involvement process that occurred during development of the project and the DEIS.

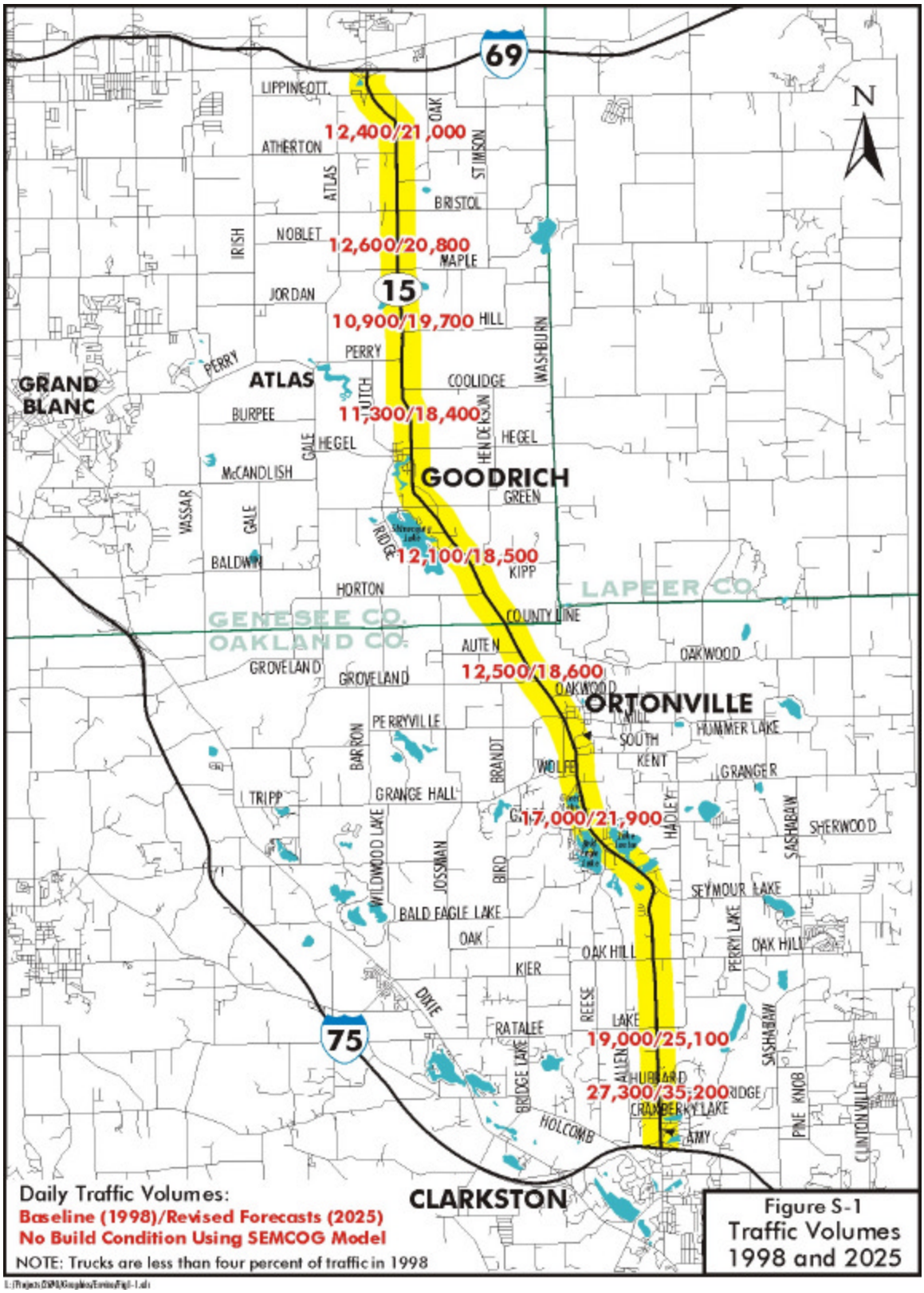
The DEIS may be reviewed at the Michigan Department of Transportation's (MDOT's) Lansing office at 425 West Ottawa Street (third floor), 48909; the Metro Region office at 18101 W. Nine Mile Road, Southfield, Michigan 48075; or, the Bay Region office at 55 E. Morley Drive, Saginaw, Michigan 48601. It is also available at the Brandon Township Public Library, 304 South Street, Ortonville, Michigan 48462; and, the offices of the Village of Goodrich at 10242 West Hegel Road, Goodrich, Michigan 48438. Technical documents referred to in this Environmental Impact Statement that support the decision-making process that led to the Preferred Alternative are available at the same locations. The Draft EIS and summaries are also available at MDOT's Transportation Service Centers at 2300 Dixie Highway, Waterford, Michigan 48238 and 9459 Lapeer Road, Davison, Michigan 48423.

1.1 Description of the Proposed Project

The M-15 project area begins at I-75 in Oakland County and extends 20 miles north to I-69 in Genesee County (Figure S-1). The Villages of Ortonville and Goodrich adjoin M-15. In each case most of the downtown area is off-line on a major cross road. The proposed project is to reconstruct M-15 to two through travel lanes in each direction. An extensive analysis, including six rounds of public meetings, led to a Preferred Alternative that is a mix of narrow boulevard, very narrow boulevard, and five-lane construction. Ramp modifications are recommended at I-75, but no changes are proposed at I-69. Though a Preferred Alternative has been identified, the final selection of an alternative will not be made until the alternatives' impacts and comments on the Draft EIS and from the public hearing have been fully evaluated.

M-15 is a two-lane rural highway with narrow shoulders and ditch drainage for most of its length. From Hubbard Road south to I-75 additional lanes are provided for right- and left-turns. From Cranberry Lake Road south two through lanes are provided in each direction to match the cross section of the bridge over I-75. The right-of-way through much of the corridor is 120 feet. The most notable exception is through Goodrich, where the right-of-way is only 66 feet.

Historically, the M-15 corridor has been a low-density rural corridor with development focused around the communities of Ortonville in Oakland County (2000 population 1535) and Goodrich in Genesee County (2000 population 1353). Out migration from the population centers of Detroit and Flint and a very high rate of growth in Oakland County have resulted in increased residential development in the study area. Lack of alternative local roads has focused much of the travel to this development on the state trunkline, M-15. Regional planning agencies such as the Southeast Michigan Council of Governments (SEMCOG), the Oakland County Planning and Economic Development Services Division, the Genesee County Metropolitan Planning Commission, the


69
15
75
N
LIPPINCOTT
ATHERTON
ATLAS
OAK
STIMSON
BRISTOL
NOBLET
IRISH
MAPLE
JORDAN
HILL
PERRY
WASHBURN
COOLIDGE
GRAND BLANC
ATLAS
BURPEE
GALE
HEGEL
HENDERSON
McCANDLISH
GOODRICH
GREEN
VASSAR
RIDGE
KIPP
BALDWIN
HORTON
LAPEER CO.
COUNTY LINE
GENESEE CO.
OAKLAND CO.
AUTEN
OAKWOOD
GROVELAND
ORTONVILLE
PERRYVILLE
BARRON
BRANDT
WOLFE
SOUTH
KENT
HUMMER LAKE
GRANGER
TRIPP
GRANGE HALL
HADLEY
SHERWOOD
SASHABAW
WILDWOOD LAKE
JOSSMAN
BIRD
SEYMOUR LAKE
BALD EAGLE LAKE
OAK
OAK HILL
KIER
PERRY LAKE
DIXIE
REESE
RATALEE
LAKE
ALLEN
HUBBARD
RIDGE
CRANBERRY LAKE
BRIDGE LAKE
HOLCOMB
AMY
PINE KNOB
CLINTONVILLE
CLARKSTON
12,400/21,000
12,600/20,800
10,900/19,700
11,300/18,400
12,100/18,500
12,500/18,600
17,000/21,900
19,000/25,100
27,300/35,200
Daily Traffic Volumes:
Baseline (1998)/Revised Forecasts (2025)
No Build Condition Using SEMCOG Model
NOTE: Trucks are less than four percent of traffic in 1998
Figure S-1
Traffic Volumes
1998 and 2025

planning units of Independence, Brandon, Groveland, Atlas and Davison townships (the first three are in Oakland County, the latter two in Genesee County), and the Villages of Ortonville and Goodrich forecast that development will continue at varying rates. Table S-1 shows growth rates over the last decade.

Table S-1
Corridor Population Growth

Townships	1990	2000	% Growth
Independence	23717	32581	37%
Brandon	12051	14765	23%
Groveland	4705	6150	31%
Atlas	5551	7257	31%
Davison	14685	17722	21%
TOTAL	60709	78475	29%
Villages			
Ortonville	1252	1535	23%
Goodrich	916	1353	48%

Source: US Census
Note: Ortonville and Goodrich are included in the township totals.

The slowest growing area, Davison Township, had a population increase of almost 21 percent. Goodrich grew by almost 48 percent. Overall, the townships along the corridor grew 29 percent.

1.2 Purpose of the Proposed Action

The purpose of the proposed project is to provide increased capacity on a Michigan trunkline route connecting I-75 and I-69. Need has been generated by rapid growth in Oakland and Genesee counties, reflecting rapid economic expansion, especially in Oakland County. M-15 needs four through travel lanes for the entirety of the corridor, to serve existing and projected travel demand and provide a safe road for the expanding corridor population.

1.2.1 Project Background

In 1991 the "Northern Oakland County Corridor Study"[1] called for widening M-15 in Oakland County. (The study was limited to Oakland County.)

In 1995 MDOT completed a "Preliminary Project Statement" that called for repaving the entire corridor and widening M-15 in Oakland County to five lanes (with consideration of a boulevard). Safety analysis performed at that time concluded that the crash experience reflected a roadway with capacity and turning movement deficiencies. It also found the need for vertical alignment improvements, improved drainage, bridge repair, improvements to side slopes and sight distances, and reconstruction of the entire roadbed.

As interest built in a widening project, public involvement began. At the time of the "Preliminary Project Statement" approximately 200 citizens attended a public meeting (September 1994) to provide their input on the need to improve M-15. An M-15 Task Force of local officials was also

[1] "Northern Oakland County Corridor Study," The Corradino Group, 1991.

formed at that time. In 1997 the Task Force petitioned the U.S. Congress to provide funds for improving M-15. M-15 was listed as a "high priority project" in Section 1602 of the 1998 Transportation Equity Act for the 21st Century. That act provided $500,000 in funding for operational improvements on M-15 from I-75 north to the Oakland/Genesee County line.

1.3 Need for the Proposed Action

The project need is driven by the predominantly residential growth in an area with freeway access to job markets in Oakland County and, to a lesser extent, Genesee County.

1.3.1 Land Use and Growth

The rapid growth in the area was noted in Table S-1. A substantial amount of vacant residential land will gradually fill in at rates determined by local authorities and the availability of sewers and water. A consequence of growth is increased congestion. For a two-lane rural highway this means reduced opportunities to pass slower-moving traffic and less safety in doing so. Those entering M-15 from cross roads and driveways must accept shorter gaps in traffic and wait longer for such gaps. The result is a pattern of lower traffic service, decreasing safety and a decreasing quality of life. The inability to get onto M-15 was noted at a number of the public meetings held for the project.

The Village of Goodrich in its "State Road/M-15 Corridor Plan," the draft of which is dated April 1999, noted the village should act to improve access management along the corridor in the village. Brandon Township and the Village of Ortonville have requested that capacity and other operational improvements be made to M-15.

1.3.2 Current Road Conditions

M-15 is classified as a rural minor arterial. It is not part of the National Highway System, but is part of the Surface Transportation Program. This means it is considered an important road, eligible for federal funding, but is not in the first tier with the interstate system and other high-type roads. Most of M-15 is two 12-foot lanes with eight-foot to ten-foot shoulders. Excluding Ortonville and Goodrich, 22 percent of M-15 has passing sight restrictions. The forty-foot paved section of M-15 through Goodrich is in 66 feet of right-of-way. That portion of M-15 was re-striped in 1999 from four lanes to three (center turn-lane configuration) with some curb added. M-15 was repaved in Genesee County in 1999 and in Oakland County in 2000. Minor improvements to shoulders and guard rails occurred at these times. Traffic signals have been added as congestion has increased. Despite the excellent surface and shoulder conditions brought by the recent paving, the condition of the roadway base is uneven.

Sufficiency ratings for 1999, prorated for subsection lengths, show a mix of conditions from excellent to poor:

- Surface 25 of a possible 25 points (excellent structural condition – reflects recent paving)
- Base 8 of a possible 15 points (poor structural condition)
- Capacity 5 of a possible 30 points (heavy congestion)
- Crashes 13 of a possible 30 points (above normal range)
- Total 51 of a possible 100 sufficiency points

Sufficiency ratings provide a means of assessing roadway needs on a comparative basis at the statewide level.

1.3.3 Transportation System Linkages

Historically, M-15 was a weekend and hunting season path to the north. When I-75 opened, traffic on M-15 was reduced. But, as I-75 became more congested and growth occurred along M-15, its position in the network of state trunklines has returned to its earlier importance. To the south, M-15 originates at Dixie Highway (US 24). From Dixie Highway to I-75, M-15 is Clarkston's main street. From I-75 north it serves travel north to Davison, Vassar, and Bay City. M-15 is competitive from a regional standpoint only north to Davison. Any trip further north and accessible to I-75 would be made on I-75.

The closest parallel state roads to M-15 are M-54, 7 miles to the west, and M-24, 10 miles to the east. Dixie Highway and I-75 offer alternative travel paths that also serve regional trips. M-15 is the only paved, continuous road between I-75 and I-69 apart from M-54 and M-24, so it collects most of the trips reaching the interstate system.

Though M-15 is a state trunkline it serves primarily local traffic. Travel modeling indicates less than 30 percent of M-15 traffic is through travel. Truck percentages are low for a trunkline route - less than five percent.

1.3.4 Traffic and Level of Service

A Traffic Report[2] found a need for four through travel lanes throughout the corridor in the design year of 2025. Generally a two-lane road can carry about 14,400 vehicles a day in a semi-rural setting with two intersections per mile. This volume reflects a Level of Service (LOS) of C. Absolute capacity is about 15,600 vehicles a day. (Note that a LOS of A represents free-flow conditions and LOS F reflects a breakdown of traffic flow.) Figure S-1 shows that existing volumes already exceed LOS D in the southern section of the corridor and the forecast of future volumes demonstrates the need for four through lanes. A four-lane divided road will carry over 30,000 vehicles a day at LOS C, while a five-lane section will carry slightly fewer. The proposed project will operate at LOS C or better.

The Level of Service at intersections for existing conditions and future build and no-build conditions is presented on Table S-2. That analysis is guided by turning movement counts made during the winter of 2000/01. These counts were expanded to 2025 based on growth factors derived from computer simulations of M-15 traffic in 2025.

Twenty-eight intersections along M-15 were examined in the traffic analysis. Currently, nine intersections are operating lower than LOS C. None of these is presently signalized. If M-15 were not widened, six of these intersections would appear to warrant a traffic signal by 2025. But, even if these signals were installed, 15 of the 28 intersections would operate in 2025 lower than LOS C, with 12 at LOS E or F. However, if M-15 were widened, no intersection would operate lower than LOS C.

[2] "Traffic Report, M-15—I-75 to I-69," The Corradino Group, November 2001.

Table S-2
Signalization and Level of Service

Cross Road	M-15 Build Condition	Existing Traffic Control	Future Traffic Control	Level of Service		
				Existing 2000	No-Action 2025	Build 2025
Lippincott	Five-lane	Signal	Signal	B	C	A
Atherton	Five-lane	None	Signal	F	A	A
Bristol	Five-lane	Flasher	Signal	F	D	A
Maple	Five-lane	None	None	C	F	B
Hill	Boulevard	None	Signal	C	B	C
Perry	Boulevard	None	Signal	C	B	B
Coolidge	Boulevard	None	None	C	E	B
East Hegel	Five-lane	Flasher	Signal	D	B	A
West Hegel	Five-lane	Signal	Signal	B	C	A
Green	Five-lane	None	None	D	F	A
Kipp	Boulevard	None	None	B	C	B
County Line	Boulevard	None	None	C	D	B
Groveland	Boulevard	None	None	B	D	B
Oakwood	Boulevard	None	Signal	F	C	B
Mill/Grange Hall	Boulevard	Signal	Signal	B	B	B
South	Boulevard	Signal	Signal	B	C	A
Granger/Kent	Boulevard	Signal	Signal	A	B	A
Wolfe	Boulevard	None	None	C	E	B
Brandon High School Entrance	Boulevard	Signal	Signal	A	B	B
Glass	Five-lane	Signal	Signal	B	F	A
Seymour Lake	Five-lane	Signal	Signal	C	E	C
Oak Hill	Boulevard	None	None	F	F	C
Hadley/Ratalee Lake	Boulevard	None	None	F	F	B
Hubbard	Boulevard	Signal	Signal	B	E	B
Deer Ridge	Boulevard	Signal	Signal	C	E	B
Berry Point	Boulevard	None	None	E	F	A
Cranberry Lake	Five-lane	Signal	Signal	B	B	A
Amy	Five-lane	None	None	F	F	B

Source: The Corradino Group

1.3.5 Crashes

An analysis of crashes by MDOT from 1989 to 1993 found the leading crash type in Oakland and Genesee counties to be rear-end collisions. More recent data provided by the Traffic Improvement Association of Oakland County indicate that this pattern has continued. Rear-end collisions result from one vehicle following too close to another in congested traffic. Data for Michigan indicate two-lane roads have a total crash rate of 541 crashes per hundred million vehicle miles, compared to 323 for four-lane divided roads and 717 for a five-lane road. It is estimated that the Preferred Alternative would experience 644 total crashes in the year 2025 compared to 707 with no project. The median of the boulevard section reduces the potential for head-on collisions by separating opposing traffic and reduces the number of conflict points. Safety benefits will accrue from the time the project opens to traffic.

2. ALTERNATIVES

Several improvement alternatives were analyzed for this project, as were the No-Action Alternative and a Mass Transit Alternative. The three "build alternatives" were: 1) Low Cost Improvements / Transportation Systems Management; 2) New Alignments; and, 3) M-15 Reconstruction. These alternatives grew out of the public involvement process. Documentation of the alternatives analysis process is found in three technical memoranda prepared for the study[3].

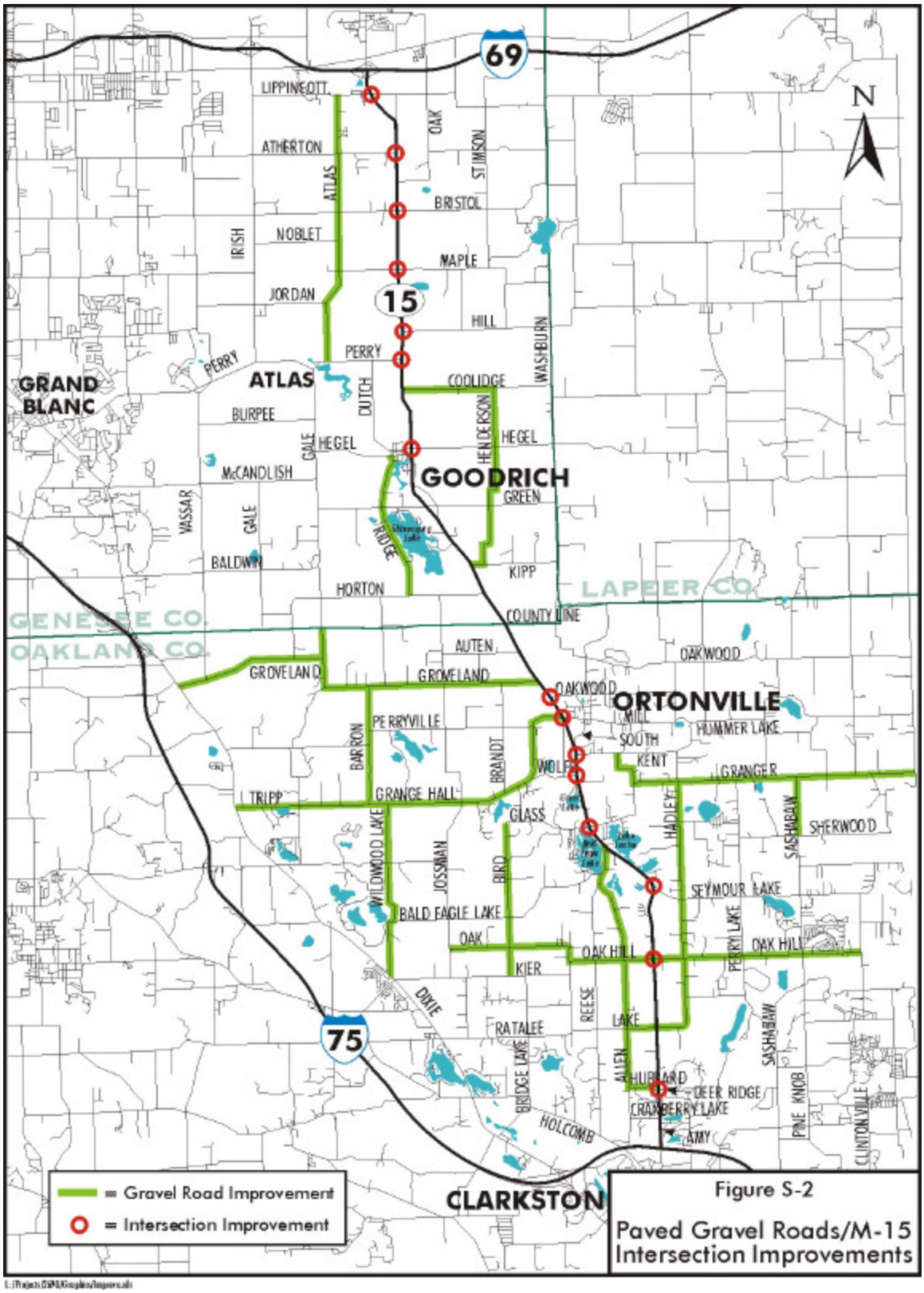
2.1 No-Action Alternative

The No-Action Alternative would consist of continued regular maintenance of M-15. The four-lane section of M-15 through Goodrich was re-striped in 1999 as a safety project from four lanes to three (center turn-lane configuration) with some curb added. M-15 was repaved in Genesee County in 1999 and in Oakland County in 2000. Minor improvements to shoulders and guard rails occurred at these times. Traffic signals have been added as congestion has increased. The No-Action Alternative would continue this pattern of maintenance and minor adjustments. It would not require the acquisition of additional right-of-way. Unacceptable levels of traffic service would result, however.

2.2 Low-Cost Improvements / Transportation Systems Management

This alternative called for paving of gravel roads to provide alternative routes to M-15, upgrading intersections along M-15, improving incident management, improving access control, and encouraging reduced trip-making (Figure S-2). Travel analysis found it did not meet the purpose and need for the project. Even with all the proposed measures in place, projected traffic volumes showed a need of four through-travel lanes along the entire length of M-15.

[3] "Technical Memorandum No. 1," The Corradino Group, August 2000. "Technical Memorandum No. 2," The Corradino Group, October 2000. "Technical Memorandum No. 3," The Corradino Group, March 2001.


69
15
75
N
LIPPINCOTT
ATHERTON
BRISTOL
NOBLET
MAPLE
JORDAN
HILL
PERRY
COOLIDGE
BURPEE
HEGEL
McCANDLISH
GREEN
KIPP
HORTON
BALDWIN
ATLAS
GRAND BLANC
GOODRICH
ORTONVILLE
LAPEER CO.
GENESEE CO.
OAKLAND CO.
COUNTY LINE
AUTEN
OAKWOOD
GROVELAND
PERRYVILLE
TRIPP
GRANGE HALL
GLASS
SOUTH KENT
HUMMER LAKE
GRANGER
SHERWOOD
SEYMOUR LAKE
BALD EAGLE LAKE
OAK
OAK HILL
KIER
RATALEE
LAKE
HUBBARD
DEER RIDGE
CRANBERRY LAKE
AMY
HOLCOMB
CLARKSTON
OAK
STIMSON
ATLAS
IRISH
PERRY
DUTCH
WASHBURN
HENDERSON
GALE
VASSAR
RIDGE
BARRON
BRANDT
WILDWOOD LAKE
JOSSMAN
BIRD
HADLEY
SASHABAW
PERRY LAKE
REESE
ALLEN
BRIDGE LAKE
DIXIE
PINE KNOB
CLINTONVILLE
= Gravel Road Improvement
= Intersection Improvement
Figure S-2
Paved Gravel Roads/M-15 Intersection Improvements

2.3 New Alignments

These options considered improving Irish Road (west of and parallel to M-15 in the north section of the corridor) and constructing bypasses of the Village of Goodrich or the Glass Road / Seymour Lake area (Figure S-3). Traffic modeling found these potential alternative routings, tested separately, would not divert sufficient traffic from M-15 to meet the purpose and need of the project. The testing included variations of the land use development scenario used in the travel model for the area. One variation reallocated land use in the corridor based on local government input so that development is shifted north towards I-69 from Oakland County. Another land use scenario reduced the growth in Atlas Township by 75 percent. Under both scenarios the demand on M-15 for four lanes remained.

2.4 M-15 Reconstruction

Because traffic forecasts show four through travel lanes are required to meet travel demand, the "super-2" and three-lane options were discarded. Given the need for turning movements through the length of the corridor, little application of a four-lane road was found, compared to a five-lane section, which allows for turn movements at all required locations. A narrow boulevard was found to have merit from traffic and safety standpoints, while still allowing turns as required. A wide boulevard, by comparison, was found to have substantially more impacts than the narrow boulevard and was dropped from further consideration when it was determined that the narrow boulevard was equal from a traffic standpoint and acceptable from a design standpoint.

2.5 Alternatives Eliminated from Further Study

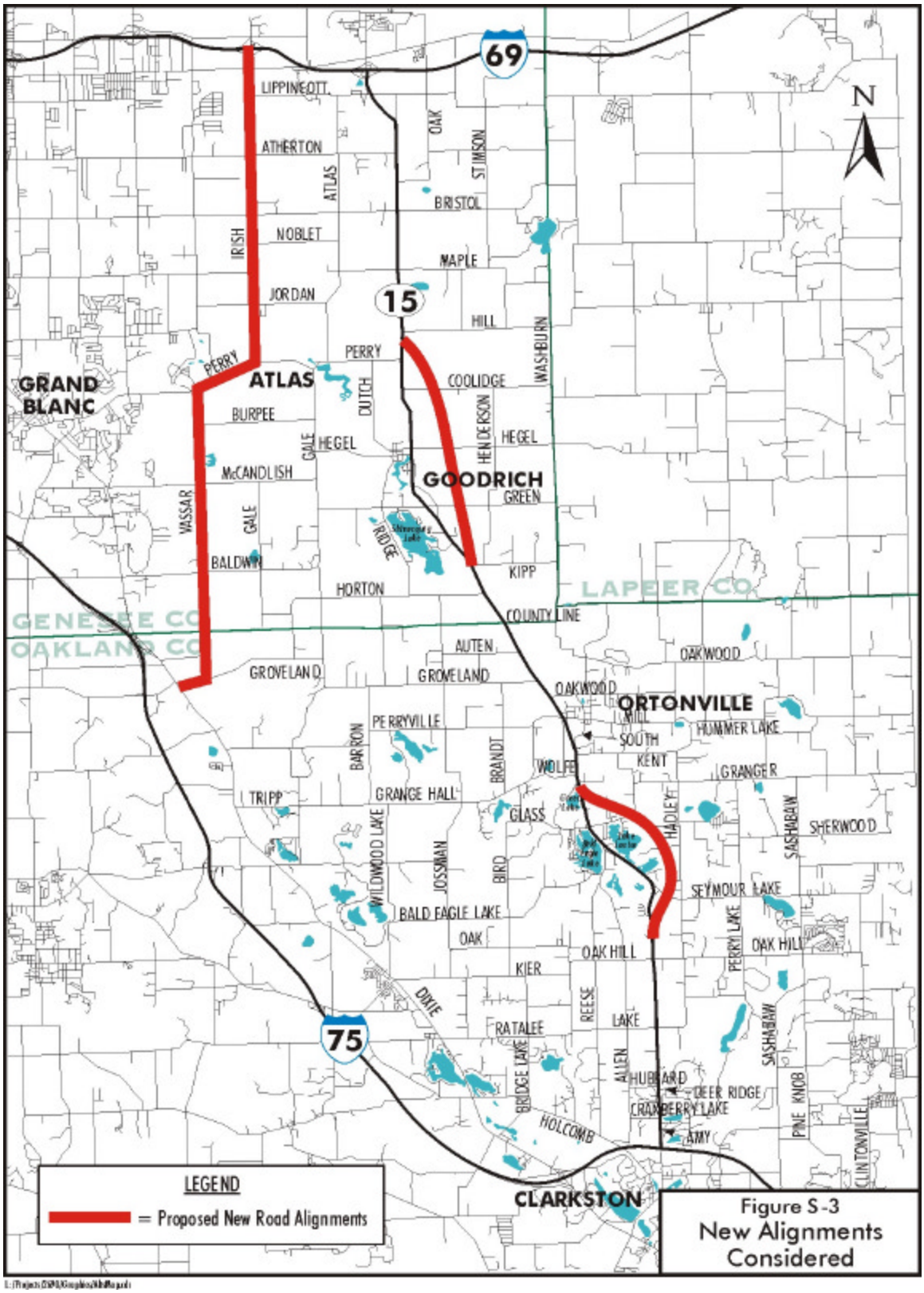
It was concluded that even under the best-case scenario the Mass Transit, Low-Cost / TSM alternatives could not reduce or divert travel demand to the point that two lanes for through travel in each direction were not needed. Therefore, they were eliminated because they are not reasonable alternatives.

The bypass alternatives and the Irish Road option did not divert sufficient travel from M-15 to reduce the need for four through travel lanes. Therefore, they were eliminated because they are not reasonable options.

The full-width or "wide" boulevard was more intrusive and caused more impacts than the "narrow" boulevard, so the latter was favored and the former eliminated because it is not a reasonable option. A one-way pair was evaluated through Goodrich, but the five-lane cross section was favored due to potential impacts of the one-way pair and the uncertainties of securing right-of-way before further development occurs.

2.6 Preferred Alternative

The narrow boulevard and five-lane sections were considered practical alternatives and were evaluated further on a sector-by-sector basis. The result is a preferred alternative that incorporates the strengths of each cross section to maximize safety and traffic flow, while minimizing impacts to wetlands and historic resources. The blend of five-lane, narrow boulevard and very narrow boulevard (recommended where access needs are few and historic or wetland


69
15
75
N
LIPPINCOTT
ATHERTON
ATLAS
OAK
ST JMSON
BRISTOL
IRISH
NOBLET
MAPLE
JORDAN
HILL
PERRY
WASHBURN
GRAND BLANC
ATLAS
COOLIDGE
DUTCH
BURPEE
GALE
HEGEL
HENDERSON
HEGEL
McCANDLISH
GOODRICH
GREEN
WASSAR
GALE
RIDGE
BALDWIN
KIPP
HORTON
LAPEER CO
GENESEE CO
OAKLAND CO
COUNTY LINE
AUTEN
OAKWOOD
GROVELAND
GROVELAND
OAKWOOD
ORTONVILLE
PERRYVILLE
HILL
SOUTH
HUMMER LAKE
KENT
BARRON
BRANDT
WOLFE
GRANGER
TRIPP
GRANGE HALL
GLASS
HADLEY
SASHABAW
SHERWOOD
WILDWOOD LAKE
JOSSMAN
BIRD
SEYMOUR LAKE
BALD EAGLE LAKE
OAK
OAK HILL
PERRY LAKE
OAK HILL
KIER
DIXIE
REESE
LAKE
RATALEE
SASHABAW
BRIDGE LAKE
ALLEN
HUBBARD
DEER RIDGE
CRANBERRY LAKE
PINE KNOB
HOLCOMB
AMY
CLINTONVILLE
CLARKSTON
LEGEND
= Proposed New Road Alignments
Figure S-3
New Alignments
Considered

avoidance is important) is shown in Figure S-4. The Engineering Report[4] for the project shows the existing and proposed roadway and right-of-way.

Though a Preferred Alternative has been identified, the No-Action Alternative remains an option. A recommended alternative will not be selected until after the public hearing and comment period are concluded and all comments have been considered.

3. IMPACTS

The following is a summary of the impacts associated with the No-Action Alternative and the Preferred Alternative (Table S-3).

3.1 Traffic and Safety

The proposed project will substantially improve traffic flow over no-action conditions. The entire length of the corridor will operate at a Level of Service (LOS) of C or better in the design year (2025), compared to breakdown conditions in the south end of the corridor with no project. The proposed action would be expected to reduce the number of total crashes in 2025 by about 60 (or about 10 %), compared to taking no action.

3.2 Relocations, Community Cohesion, Environmental Justice, Land Use, and Farmland

The proposed project is expected to require the relocation of 38 dwelling units (all single-family residences) and 40 businesses, representing about 200 jobs.

Increased traffic will be detrimental to community cohesion, if no action is taken. Providing a boulevard section in key locations such as in Independence Township and in Ortonville responds to community desires expressed during the course of the study to develop a road that supports community cohesion.

A review of data on low-income and minority populations finds the project would not result in disproportionately high and/or adverse human health or environmental effects on minority or low-income populations.

Rapid growth in Oakland County puts continued pressure on communities and townships in the corridor that have grown very rapidly in the last decade (Table S-1). Undeveloped land, in most cases already zoned for low-density residential use, will continue to develop with or without the project. The proposed road is consistent with local and regional land use planning.

Approximately 3 acres of farmland would be taken by the project. No prime and unique farmlands would be taken, nor any land enrolled in the P.A. 233 program.

[4] "Preliminary Engineering Report," Orchard, Hiltz and McCliment, December 2001.

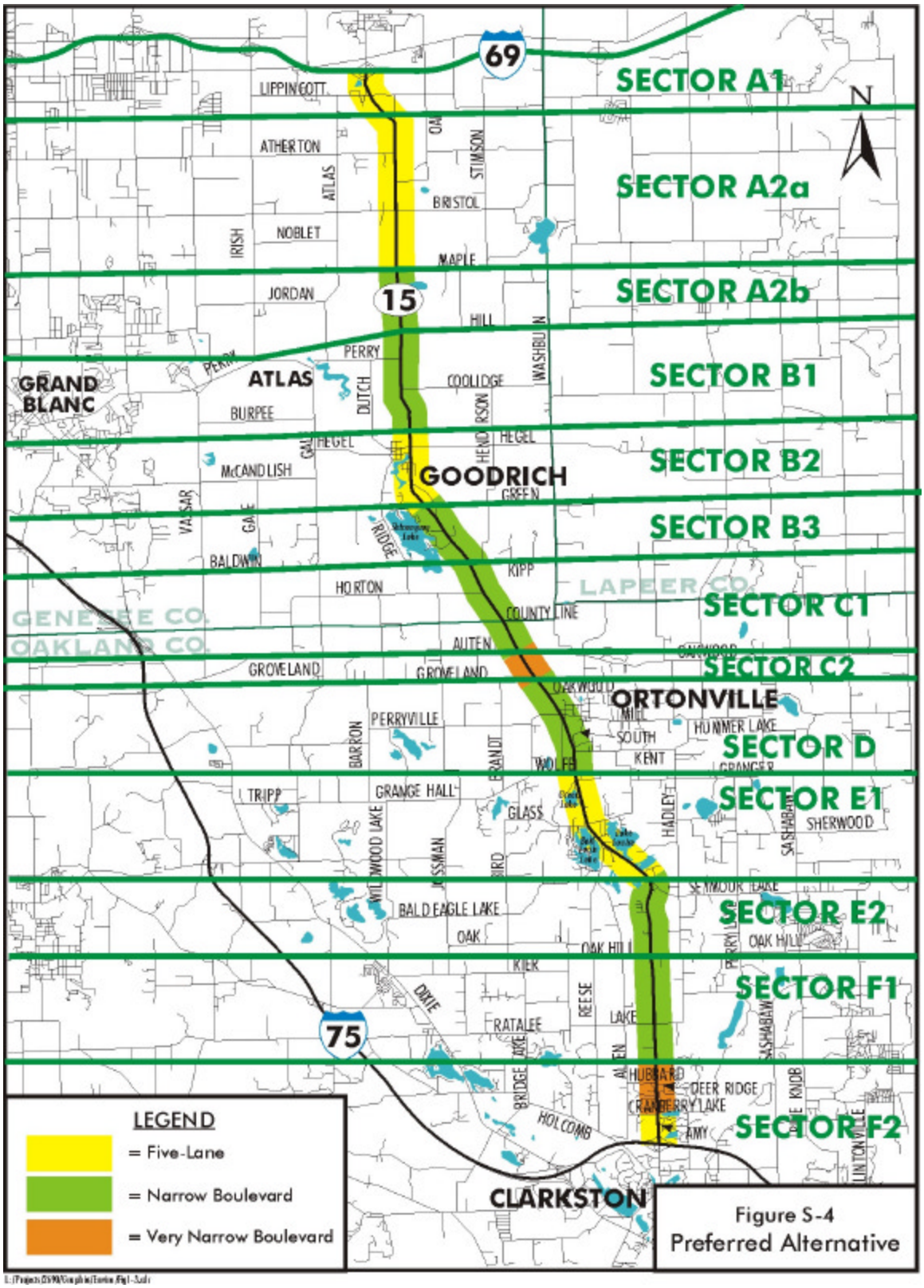

SECTOR A1
SECTOR A2a
SECTOR A2b
SECTOR B1
SECTOR B2
SECTOR B3
SECTOR C1
SECTOR C2
SECTOR D
SECTOR E1
SECTOR E2
SECTOR F1
SECTOR F2
N
69
15
75
LIPPINCOTT
ATHERTON
ATLAS
STIMSON
BRISTOL
IRISH
NOBLET
MAPLE
JORDAN
HILL
WASHBURN
PERRY
GRAND BLANC
ATLAS
DUTCH
COOLIDGE
HENDERSON
BURPEE
HEGEL
McCANDLISH
GOODRICH
GREEN
VASSAR
RIDGE
BALDWIN
KIPP
HORTON
LAPEER CO.
GENESEE CO.
OAKLAND CO.
COUNTY LINE
AUTEN
GROVELAND
OAKWOOD
ORTONVILLE
PERRYVILLE
BARRON
BRANDT
WOLFE
SOUTH
KENT
HUMMER LAKE
GRANGER
TRIPP
GRANGE HALL
GLASS
HADLEY
SASHABAW
SHERWOOD
WILDWOOD LAKE
MOSSMAN
BIRD
BALD EAGLE LAKE
OAK
OAK HILL
KIRK
DIXIE
RATALEE
REESE
LAKE
BRIDGE
ALLEN
HUBBARD
DEER RIDGE
CRANBERRY LAKE
AMY
KNOB
HOLCOMB
CLARKSTON
LEGEND
= Five-Lane
= Narrow Boulevard
= Very Narrow Boulevard
Figure S-4
Preferred Alternative

Table S-3
Summary of Impacts

Impact Category	Expected Impact
Traffic Flow	M-15 will improve to at least Level of Service C. Safety will improve.
Relocations	38 single-family residences, 40 businesses, 200 employees.
Community Cohesion	Existing high speed, two-lane rural road acts as barrier. Five-lane sections will continue this. Boulevard sections offer community enhancement and a mid-road refuge for pedestrians and bicyclists.
Environmental Justice	No disproportionately high and adverse human health or environmental effects on minority or low-income populations.
Land Use	Consistent with planning documents. Several documents emphasize improved access control.
Farmland/Act 233 Land	3 acres of active farmland taken. No prime or unique farmlands. No Act 233 lands.
Economics	Added capacity responds to growth. Tax base losses from right-of-way acquisition represent 0.014 % of the property taxes collected in townships and villages in corridor.
Air Quality	Project will reduce idle emissions and improve traffic flow. No violations of the National Ambient Air Quality Standard for carbon monoxide. Computer modeling of conformity is necessary after project inclusion in SEMCOG's and Genesee County Metropolitan Planning Commission's long-range plans.
Noise	175 dwelling units exposed to 66 dBA or more (residential criterion), compared to 145 with No-Action. No mitigation is reasonable because of either front yard exposure and/or low density of homes affected.
Surface Water Impacts	1 lake crossing, 2 pond crossings, 4 perennial stream crossings, 6 intermittent stream crossings, 5 county drain crossings.
Wetlands	2.5 acres of Palustrine Forested & lake fringe, plus 10.9 acres of Palustrine Open-water, Palustrine Emergent, and Palustrine Shrub-Scrub. Total 13.4 regulated acres.
Threatened/Endang. Species	1 state threatened and 3 state special concern species found.
Cultural Resources	12 potential *National Register* eligible sites affected. Adverse effects on several sites requiring Draft Section 4(f) Evaluation and Memorandum of Agreement. Phase II analysis required at one archaeological site.
Parks/Recreation	No contiguous parks. M-15 is Michigan's first Heritage Recreational Route.
Visual Conditions	Mix of five-lane and boulevard cross sections in response to local desire for aesthetic road.
Contaminated Sites	31 sites total are recommended for further testing, including: 1 dump; 7 sites potentially affected by hazardous material handling; and, 23 underground storage tank sites.
Soils	Organic soils and wetlands pose greatest challenge. This is a manageable situation.
Utility Systems	Relocation of sewer line on west side of M-15 north of Bristol Road. No effect on high-tension electric line.
Secondary and Cumulative	Project responds to growth, which totaled 29 % in 1990s. Quality of life will be maintained.
Energy	Energy used during construction. Fuel savings from improved traffic flow upon opening.
Project Cost	
Right-of-way	$34.9 million
Construction	$78.4 million
Design & Management	$19.6 million
Total	$132.9 million

Source: The Corradino Group

3.3 Economics

Economic activity in the project area is generated by a variety of market sectors including retail trade, services, education, and public administration. The corridor has been subject to rapid development. This trend is expected to continue.

M-15 is a good road with access to land suitable for residential development, which has contributed to today's congestion and continued predictions of population and traffic growth. Adding capacity to M-15 is a response to the growth that has already occurred and anticipates the growth predicted by the local political jurisdictions in the corridor.

Property acquisition will result in a reduction in real property tax revenues of about $362,000, based on the right-of-way cost estimate. This represents only 0.014 percent of the property taxes collected by the townships and villages in the corridor. The largest effect would be on Ortonville, which has a relatively small tax base and the least amount of undeveloped property. The increase in State Equalized Value of township and village properties over the coming years will outweigh potential losses. Many of the relocated businesses and residents are likely to relocate within the corridor, minimizing tax losses.

3.4 Air Quality

Air quality will improve, as there will be less idling and smoother traffic flow. A test of carbon monoxide (CO) concentrations at the busiest intersection in the M-15 corridor where humans might be present found the ambient air quality standard would not be violated. Approval of the Final EIS for this project requires that the project be added to the long-range plans of the Southeast Michigan Council of Governments (SEMCOG) and the Genesee County Metropolitan Planning Commission after a determination of air quality conformity.

3.5 Noise

It is forecast that the Preferred Alternative will expose 175 dwelling units to noise of 66 dBA or higher (the threshold for determining the residential properties impacted), compared to 145 with the No-Action Alternative. No mitigation is reasonable because noise barriers are not effective when placed in the front of homes with gaps created for driveways.

3.6 Ecological Resources

Approximately 14 acres of regulated wetlands would be directly affected (some is already roadway right-of-way), requiring replacement through agreement with the Michigan Department of Environmental Quality (MDEQ) and the U.S. Army Corps of Engineers. The No-Action Alternative would have no effect on wetlands.

Surface water quality will be protected by erosion control and stormwater management during construction and after. The No-Action Alternative would not change existing drainage patterns or flow.

No known federal threatened and endangered species will be affected, although potential habitat for the Eastern massasauga rattlesnake (a candidate for federal listing) may be affected. One state-listed threatened species, the spotted turtle, was found. Additionally, three state-listed species of special concern could be affected, the wahoo (a plant), the red mulberry (a tree) and Blandings turtle. Five other state-listed species of special concern could be present, as suitable habitat is available.

3.7 Cultural Resources and Parkland

The project would have adverse effects on several sites that are considered potentially eligible for the *National Register of Historic Places*, requiring a Memorandum of Agreement with the State Historic Preservation Officer (SHPO). Phase II analysis will be required at one archaeological site.

No parks will be affected.

3.8 Visual Conditions

The dominant visual characteristic of the corridor is large-lot residential uses punctuated by lakes and wetlands, and in Genesee County, rural landscapes, both natural and manmade (farmlands). Commercial strip development occurs near Ortonville and at the north and south ends of Goodrich. Commercial/office uses dominated the visual scene near Lippincott Road in Davison Township.

When improvements to M-15 were proposed in the early 1990s in the form of a five-lane road, those in the corridor expressed a desire for a more aesthetically pleasing road – a boulevard. The aesthetic attributes of the boulevard have been recognized to integrate better with the character of the corridor and so, the Preferred Alternative mixes five-lane and boulevard cross sections. Where the narrow boulevard "fits" with limited impacts, it has been proposed.

3.9 Hazardous Materials

Although further testing for hazardous materials is recommended at a number of sites, no substantial problems with contaminated materials are anticipated.

3.10 Soils and Utilities

Organic soils are present at a number of locations in the corridor, especially in wetland areas. The presence of these soils increases project costs as special techniques are required to provide a stable roadbed. Depending on the depth and breadth of these soils, techniques range from total soil removal within the influence of the proposed pavement to partial removal. High-quality geotextile fabrics may be used to provide the additional strength required to support the proposed roadway.

Reconstruction of M-15 at the north end of the corridor could affect sections of a sewer line along the west right-of-way line north at Bristol Road. A high-tension electrical line north of County

Line Road would not be affected as the towers are well outside the right-of-way. Other effects on utilities would be consistent with normal utility relocations for roadway projects.

3.11 Secondary and Cumulative Impacts

A number of communities in the corridor expressed interest in controlling growth in interviews conducted for the study. The general trend has been to zone residential areas for large lot development. The lack of sewers has historically limited the density of development, including commercial and industrial uses.

The townships in the corridor have not pursued paving of local and county roads as travel alternatives to M-15 (Independence Township and, to a lesser extent, Davison Township are exceptions). Consequently, M-15 has been and continues to be the focus of growth and travel in the corridor. Tremendous growth in the employment base in Oakland County and a general movement to the outer limits of both Oakland and Genesee counties has resulted in a market for much residential development in the corridor as evidenced by the population growth data shown in Table S-1.

Widening of M-15 addresses a need already in evidence, not an induced need. There is no indication that land use policies will limit growth to a level that the need for four lanes of through travel on M-15 will be eliminated. Growth has and will occur whether or not M-15 is reconstructed. Reconstruction of M-15 keeps roadway development in step with overall development. This is especially so given that project implementation is likely a number of years away.

If nothing were done to improve M-15, growth will continue to occur. The population of the townships in the project area grew 29 percent over the last ten years with no improvement to M-15. Continued growth will lead to breakdown conditions on M-15 and the entire corridor will be over capacity during peak periods. Increased traffic will be detrimental to community cohesion, if no action is taken.

Improving M-15 will improve air quality by reducing congestion, lessening idling, and smoothing traffic flow.

If nothing were done, crashes will increase at a faster rate than if the project were built. If nothing were done, it is estimated that there will be 707 crashes in 2025. It is estimated that the Preferred Alternative will experience 644 crashes in 2025.

3.12 Energy

Energy will be used to construct the project. Fuel savings to motorists should be realized in the long term due to improved traffic flow. Motorists will also be able to maintain more constant traveling speeds, adding to their fuel savings.

3.13 Cost

The estimated cost of construction is $ 78.4 million and of right-of-way is $ 34.9 million. Adding design and construction management costs, the result is a total project cost estimated at $ 133 million.

4. AREAS OF CONTROVERSY

The principal areas of controversy, apart from typical issues arising out of right-of-way needs, are road widening through the Village of Goodrich, taking of wetlands, and impacts to resources potentially eligible for the *National Register of Historic Places*.

5. UNRESOLVED ISSUES

For this project to advance to design it must be included in MDOT's Long-Range Plan, and the long-range plans of the appropriate regional planning agencies – the Southeast Michigan Council of Governments (SEMCOG) and the Genesee County Metropolitan Planning Commission. The status of the M-15 Project with respect to these documents at the time of the writing of this Draft EIS Summary is:

- MDOT's Build Michigan III Long-Range Plan – not listed
- SEMCOG's 2025 Regional Transportation Plan – not listed
- Flint Genesee County 2020 Long-Range Transportation Plan – not listed

6. PROJECT STATUS

The environmental clearance for this project is tentatively scheduled for completion in early 2002. The project will need to be included in the SEMCOG 2025 Regional Transportation Plan and the Flint - Genesee County 2020 Long-Range Transportation Plan before the environmental clearance process can be completed. Then, final design and right-of-way acquisition could begin. There are no funds identified for this project in the current Build Michigan Program, which outlines roadway expenditures over the next five years. Consequently, the construction of the proposed improvement is not yet scheduled.

7. FORMAT OF HEARING

The public hearings for this project will be conducted using an "open forum" style to allow the public to gather information on the project on a one-to-one basis. It also makes it easier for citizens to become familiar with the alternatives and express their concerns. The hearing room will be set up so that participants may stop by anytime during the scheduled hours. Participants may talk with MDOT representatives and its consultants regarding environmental issues, engineering and design, real estate, and other matters. There will be a continuous audiovisual presentation on the alternatives considered and the Preferred Alternative.

Two court reporters will be available for those persons who would like to make a statement or comment about the project and have it included in the transcript of this public hearing. Citizens can also fill out a comment form and deposit it into the comment boxes at each public hearing site.

COMMENT FORM

DRAFT ENVIRONMENTAL IMPACT STATEMENT

& Draft Section 4(f) Evaluation

The Michigan Department of Transportation has performed an environmental and engineering analysis of M-15 between I-75 and I-69, establishing a preferred alternative and determining its potential impacts. This is your opportunity to comment on the Draft Environmental Impact Statement / Draft Section 4(f) Evaluation.

*** * * PLEASE PRINT CLEARLY * * ***

Name **Date:**

Address

City / State / Zip

TELL US WHAT YOU THINK.

We want to know your concerns regarding the proposed improvements to M-15. Each comment will be considered and will be included in the official transcript of the public hearing. Comments are due 60 days after the date of the public hearing.

(continue comments on back)

If possible, please return this before you leave. If not, please mail, fax or email it to:

José López, Public Hearings Officer
Bureau of Transportation Planning
Michigan Department of Transportation
P.O. Box 30050, Lansing, MI 48909
Fax: (517) 373-9255; email: lopezjos@michigan.gov